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DNA ENCODING A HUMAN SEROTONIN (5-HT₂) RECEPTOR AND USES THEREOF

Abstract of the Disclosure

5 The present invention provides an isolated nucleic acid molecule encoding an 5-HT₂ receptor, and an isolated protein which is a human 5-HT₂ receptor.

The invention also provides vectors comprising DNA molecules encoding a human 5-HT₂ receptor, and vectors adapted for expression of the 5-HT₂ receptor in bacterial, yeast, or mammalian cells.

In addition, the invention provides a DNA probe useful for detecting nucleic acid encoding the 5-HT $_2$ receptor, a method for determining whether a ligand which is not known to be capable of binding to the 5-HT $_2$ receptor can bind to the 5-HT $_2$ receptor, a method for detecting the presence of 5-HT $_2$ receptor on the surface of a cell, and a method of screening drugs to identify drugs which specifically interact with, and bind to, the 5-HT $_2$ receptor.

The invention herein also concerns an antibody directed to the human 5-HT₂ receptor, such as a monoclonal antibody directed to an epitope of the 5-HT₂ receptor present on the surface of a cell and having an amino acid sequence included within the amino acid sequence shown in Figure 2.

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